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DAVID B SMITH
MICHAEL BEST & FRIEDRICH
100 EAST WISCONSIN AVENUE
MILWAUKEE WI 53202-4108

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EXAMINER

LISEHORA, J

| ART UNIT | PAPER NUMBER |
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UNITED STATES DEPARTMENT OF COMMERCE
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 19

Application Number: 08/747,873
Filing Date: November 13, 1996
Appellant(s): Johannes H. Megens

MAILED

OCT 20 1997

GROUP 3500

Kevin P. Moran
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed August 25, 1997.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

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(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that there are five groupings of claims that are separately patentable. The brief provides reasons why the claims do not stand or fall together as set forth in 37 CFR 1.192(c)(7) and (c)(8).

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(8) Claims Appealed

A substantially correct copy of appealed claims 1-21 appears on pages 14-21 of the Appendix to the appellant's brief. Claims 1-21 are correct, except that the underlining and bracketing required by MPEP 1453, MPEP 1455, 37 CFR 1.121, and 37 CFR 1.173 has been omitted from these claims.

(9) Prior Art of Record

The following is a listing of the prior art of record relied upon in the rejection of claims under appeal.

| | | |
|-----------|----------------|---------|
| 3,659,899 | Phillips et al | 05-1972 |
| 3,784,255 | Smock | 01-1974 |
| 3,822,861 | Scott | 07-1974 |
| 3,902,213 | Pfleger et al | 09-1975 |
| AU588734 | Beer | 09-1989 |

(10) New Prior Art

No new prior art has been applied in this examiner's answer.

(11) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (U.S. 3,659,899). Regarding Claims 1 and 12, Phillips et al teach all of the recited structure with the exception that Phillips et al do not specifically teach that the base (floor 65) is inclined. It would have been obvious to incline the base (floor 65) in the same way that a roof, sidewalk, driveway, or garage floor is inclined in order to facilitate drainage of liquids therefrom. Regarding Claim 8, it would have been obvious to provide a housing in a bottom portion of the recess in order to provide the side walls shown surrounding the bag 66 in Figure 6 and to facilitate installation and removal of the section 63 and bag 66 from the loading platform 62.

Claims 2, 6-7 and 13-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (U.S. 3,659,899) in view of Smock (U.S. 3,784,255). Regarding Claims 2 and

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13-15, Phillips et al teach a ventilator (pneumatic pump 50), while Smock similarly provides a supply of air under pressure, such as air tanks 48 which also meet the requirements of the recited "ventilator". Smock teaches a bag assembly 35 including an opening in a bottom portion of the bag assembly for receiving the pressurized air. It would have been obvious, in view of this teaching of Smock, to locate an opening in the bottom of the inflatable flexible body (bag 66) of Phillips et al (U.S. 3,659,899) in order to permit inflation and deflation of the bag 66 from an out-of-the way, underneath location. It further would have been obvious, in view of the location of pneumatic pump 50 in Figures 4 and 5 of Phillips et al (U.S. 3,659,899), and the location of the lines 45 of Smock, to locate a ventilator under the base of Phillips et al (U.S. 3,659,899) in order to reduce the number and length of supply lines, and to protect the ventilator from adverse weather, heavy machinery, abuse, and/or vandalism. Regarding Claims 6-7, the "bellows" and "air spring" are not recited in sufficient detail from the bag 66 of Phillips or the assembly 35 of Smock. The rings 37 of Smock constitute "a rigid bottom and a rigid top". It would have been obvious in view of the rings 37 of Smock, to connect a "bellows" or "air spring" to the bottom surface of the section 63 of Phillips et al in order to avoid shifting of the bellows or air spring relative to the section 63. Regarding claims 16-17, it would have been obvious, in view of Smock (Figures 3 and 4), to make the periphery of the bag smaller than the periphery of the planar member in order to reduce the volume of air needed to operate the apparatus and/or to reduce the amount of material (and the weight and the expense) required for the bag 66.

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Regarding claims 18-19, Smock (U.S. 3,784,255) teaches clamping ring units 37a which surround at least a portion of the inflatable flexible body (upper bag 35b and lower bag 35a) and which are positioned such that they limit lateral expansion of the inflatable flexible body.

Regarding claim 20, it would have been obvious, in view of rings 20 of Smock (U.S. 3,784,255), to provide means for detachably connecting an upper surface of the inflatable flexible body with a lower surface of the planar member in order to facilitate replacing worn-out flexible bodies.

Regarding claim 21, note that the rings 37 of Smock are attached to the assembly 35 and to the body 12 by some type of fastener, as shown in Figures 3 and 4. It would have been obvious to use buttons in order to help distribute loads and stresses across a significant surface area of the rings 37.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (U.S. 3,659,899) as applied to claims 1, 8 and 12 above, and further in view of Scott (U.S. 3,822,861). Scott teaches in column 5, line 50, that nylon mesh reinforced polyethylene is an appropriate material for an inflatable bladder. Accordingly, it would have been obvious to form the inflatable bag 66 of Phillips et al from nylon mesh reinforced polyethylene in order to ensure that the inflatable bag would withstand the necessary pressures and withstand repeated inflation/deflation cycles.

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (U.S. 3,659,899) as applied to claims 1, 8 and 12 above, and further in view of Beer (AU 588734). Beer teaches on page 5 that a PVC coated polyester fabric is a suitable flexible material for the inflatable bag 40. Accordingly, it would have been obvious to make the bag 66 of Phillips et al from a PVC coated fabric in order to provide the necessary strength, flexibility, and gas tightness.

Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al (U.S. 3,659,899) as applied to claims 1, 8 and 12 above, and further in view of Pfleger et al (U.S. 3,902,213). It would have been obvious, in view of the lip 8 of Pfleger et al (U.S. 3,902,213), to provide a similar lip on the section 63 of Phillips et al (U.S. 3,659,899) in order to provide an extension of the section 63 which could be extended in order to support the section 63 on a truck body in a conventional manner (see column 5, lines 2-15 of Pfleger, for example).

(12) New Ground of Rejection

This examiner's answer does not contain any new ground of rejection.

(13) Response to argument

Group I - claims 1, 3, 4 and 6-12

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The Examiner maintains that it would have been obvious to incline the base (floor 65) in the same way that a roof, sidewalk, driveway, or garage floor is inclined in order to facilitate drainage of liquids therefrom.

Group II - claim 2

The Examiner maintains that it would have been obvious, in view of the location of the opening in the bag assembly 35 of Smock, to locate an opening in the bottom of the inflatable flexible body (bag 66) of Phillips et al (U.S. 3,659,899) in order to permit inflation and deflation of the bag 66 from an out-of-the-way, underneath location. It further would have been obvious, in view of the location of pneumatic pump 50 in Figures 4 and 5 of Phillips et al (U.S. 3,659,899), and the location of the lines 45 of Smock (U.S. 3,784,255), to locate a ventilator under the base of Phillips et al (U.S. 3,659,899) in order to reduce the number and length of supply lines, and/or to protect the ventilator from adverse weather, heavy machinery, abuse, and/or vandalism. One of ordinary skill in the art would have knowledge that ventilators last longer when not exposed to adverse weather, heavy machinery, abuse, and/or vandalism. One of ordinary skill in the art would have knowledge that shorter lengths of supply lines would cut costs and reduce the chances of damage to the supply lines.

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Group III - claims 13-15

The Examiner maintains that it would have been obvious, in view of the location of the opening in the bag assembly 35 of Smock, to locate an opening in the bottom of the inflatable flexible body (bag 66) of Phillips et al (U.S. 3,659,899) in order to permit inflation and deflation of the bag 66 from an out-of-the-way, underneath location. It further would have been obvious, in view of the location of pneumatic pump 50 in Figures 4 and 5 of Phillips et al (U.S. 3,659,899), and the location of the lines 45 of Smock (U.S. 3,784,255), to locate a ventilator under the base of Phillips et al (U.S. 3,659,899) in order to reduce the number and length of supply lines, and/or to protect the ventilator from adverse weather, heavy machinery, abuse, and/or vandalism. One of ordinary skill in the art would have knowledge that ventilators last longer when not exposed to adverse weather, heavy machinery, abuse, and/or vandalism. One of ordinary skill in the art would have knowledge that shorter lengths of supply lines would cut costs and reduce the chances of damage to the supply lines.

Group IV - claims 16-19

Smock (U.S. 3,784,255) teaches an inflatable flexible body (bag assembly 35) wherein the periphery of the inflatable flexible body (bag assembly 35) is spaced inwardly from the periphery of the planar member (body 12) that it lifts. Although the Smock device is used in a dump vehicle rather than in a loading dock, Phillips et al (U.S. 3,659,899) teaches (column 3, lines 17-18), the desirability of using the same type of gas impervious bag 66 in the loading dock (Fig. 6) that is

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used in the dump body (Figures 1 and 5). It would have been obvious to one of ordinary skill in the art to choose among the various known shapes and sizes of available inflatable flexible bags for lifting loading docks and/or dump bodies depending upon the particular weights, loads, pressures, fluids, etc. involved in a particular application.

Group V - claims 20-21

It remains the position of the Examiner that it would have been obvious, in view of the clamping ring units 37 of Smock (U.S. 3,784,255), to provide means for detachably connecting an upper surface of the inflatable flexible body with a lower surface of the planar member in order to facilitate replacing worn-out flexible bodies. Some type of fastener for the ring units 37 is illustrated in Figures 3, 4, and 5 of Smock (U.S. 3,784,255). Using a fastener with a head including a button would have been obvious in order to distribute forces over a larger area in order to prevent the head (button) from pulling through.

It is clear from column 3, lines 17-18 of Phillips et al (U.S. 3,659,899), that the lifting of a loading dock with an impervious bag is analogous to the lifting of a dump body with an impervious bag. Smock (U.S. 3,784,255) provides valuable teachings regarding confining the flexing of the bags 35a and 35b to a predetermined arcuate path (column 3, lines 16-18). The ring units 37 are a key part of this contribution by Smock. By anchoring the bags at the bottom, in the middle, and at the top, they can be maintained closer to the pivot axis 21.

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The applicant's representative has argued that Smock provides no teaching, suggestion or motivation for making the air bag assemblies detachably connected to the body in the claimed manner. It remains the position of the Examiner that it would have been obvious to provide means for detachably connecting an upper surface of the inflatable flexible body with a lower surface of the planar member in order to facilitate replacing worn-out flexible bodies. In other words, one of ordinary skill in the art would recognize that the inflatable bag assemblies have limited life spans, and that they would need to be periodically replaced. Providing a detachable connection to the planar member would have been obvious in order to facilitate such necessary and anticipated periodic replacement. The applicant's representative has argued that the "means for detachably connecting" is limited to the buttons disclosed in the specification and equivalents thereof. The specification, however, also provided that the bag could be connected with the lower side of the filling piece by adhesive. Accordingly, the "means for detachably connecting" must be broad enough to include both adhesives and buttons, since the specification does not suggest that attaching with an adhesive results in a non-detachable connection. Additionally, since the "buttons" were not illustrated in the application as originally filed, and since the application as originally filed gave no details of the buttons, a broad definition of "buttons" must be assumed that encompasses any and all known "buttons". It should be particularly noted that the specification, as originally filed, did not state that the buttons can be utilized without the need for extra tools. Accordingly, the statement by the applicant's representative that "As used in the patent application, the phrase 'means for detachably connecting' does not cover fasteners that require

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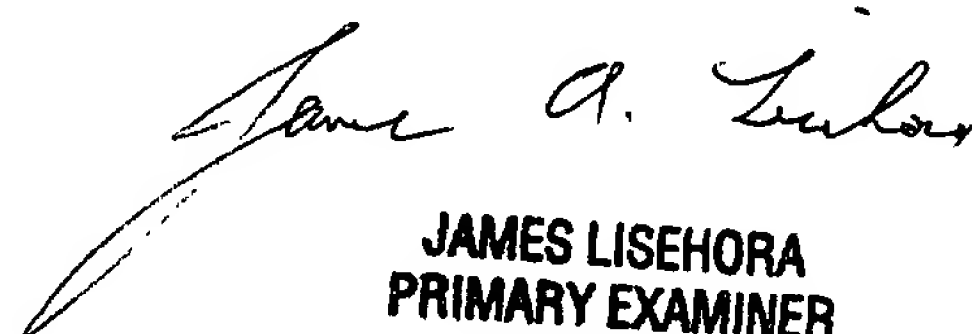
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separate tools (e.g., bolts or screws)" should not be used in the 112, sixth paragraph analysis. It remains the position of the Examiner that a screw, bolt, or rivet can include a "button" as a head in order to help distribute loads and stresses across a significant surface area.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


**JAMES LISEHORA
PRIMARY EXAMINER
GROUP 3500**

JAL
October 19, 1997

David B. Smith
Michael Best & Friedrich
100 East Wisconsin Avenue
Milwaukee, WI 53202-4108

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